

**Guadalupe, San Antonio, Mission, and Aransas Rivers and  
Mission, Copano, Aransas, and San Antonio Bays  
Basin and Bay Area Stakeholder Committee (BBASC)**

**Wednesday, May 4, 2011**

Guadalupe-Blanco River Authority, River Annex  
905 Nolan, Seguin, Texas 78155

**MINUTES**

**Members Present:** Suzanne Scott, Chair; Dianne Wassenich, Vice Chair; Bill Braden; Tyson Broad; Thurman Clements; David Crow; Paula DiFonzo; Ken Dunton; Gary Middleton (for Jerry James); Everett Johnson; Steve Fotiades; Jay Gray; Chris Hale; Karl Dreher; James Lee Murphy; Mike Mecke; Mike Peters; Robert Puente; Con Mims; Jack Campbell; Kim Stoker; Walter Womack; Garrett Engelking; West Warren; and Jennifer Youngblood.

**I. and II. Introductions and Public Comment:**

Roll call was taken and a quorum was reached. Jennifer Ellis distributed a newspaper article from the Houston Chronicle describing a project by the City of Houston and several conservation organizations as an example of potential strategies that can be used to meet environmental flow standards. She added that a white paper by NWF on proposed strategies will be presented at the next meeting. Liz Smith talked about a project funded by the Coastal Bend Bay and Estuary Program (CBBEP) to identify sites for conservation and restoration in the San Antonio Bay estuary to be completed by August, 2011. Betty Stiles, representing Aransas County, announced that the Navigation District recently approved the University of Texas Marine Science Institute (UTMSI) to study blue crab larva in the bay and estuary system, and would appreciate the BBASC's efforts to preserve the freshwater needs of the area.

**III. Discussion and Agreement on Agenda**

The draft meeting agenda was approved by consensus.

**IV. Approval of Minutes from the April 19, 2011 Meeting**

Minutes for the April 19, 2011 meeting were approved by consensus.

**V. Facilitators Report including Review and Consensus on BBASC Purpose Statement (Marty Rozelle, Rozelle Group)**

Marty Rozelle, Rozelle Group, reviewed the draft purpose statement and role of the facilitator in group discussions. Susan Springer, Rozelle Group, talked about the ground rules for use during the meeting. Members discussed revisions to the draft purpose statement in light of the SB3 charge, and approved the purpose statement as amended.

**VI. Technical Evaluations with Facilitated Discussion of Water Supply Project Firm Yields and New Run-of-River Permits (Perkins, Oborny, Johns)**

### **Task I—San Antonio River Project**

Brian Perkins, HDR, discussed the San Antonio River (Lower Basin) project near Goliad, a large theoretical project needed to meet one of the two project requirements of Task I of the charge. The project consists of a large run of the river diversion from the San Antonio River near Goliad to an off-channel reservoir for subsequent uniform delivery of the firm yield to the Twin Oaks Water Plant. Mr. Perkins discussed the hydrologic conditions and how the project was evaluated using the four scenarios; the BBEST recommendations, Lyons method, consensus criteria (CCEFN), and no environmental flow constraints. He explained how the amount of the flows diverted and/or left in the river is determined by needs of senior water rights, environmental flow constraints, pipeline constraints and permit constraints. He walked through an example to explain the process used to determine firm yield and apply the environmental flow criteria, before comparing the project costs based on results from each criteria.

Ed Oborny, Bio-West focused on the instream assessment of the Goliad project including evaluation of the magnitude, frequency and duration of flows, and the quantitative ecological ramifications from the project. He discussed what magnitude, frequency, and duration mean to the project based on the four levels of flows: subsistence flows, base flows, high flow pulses and overbanks. He talked about the existing studies completed in the area on species, riparian communities and their relationship to flow, and sediment transport. He said the evaluation of the project focused on water quality (dissolved oxygen and temperature) at low flows; habitat availability at the subsistence and base flow levels; riparian communities and their link to flow pulses; and changes in total annual volume which are important components in riparian communities and sediment transport. He explained the tools available and how they are used.

Mr. Oborny explained how to use the results and the different displays available to spatially relate flow, habitat, species, and water quality. He said the results of the study are supportive of the project except for the following:

- “Stress” at the subsistence flow level of the BBEST recommendation based on the water temperatures during extremely hot months (July and August);
- A 10% annual reduction in sediment yield may be a concern depending on clarification of the BBEST recommendation.

He mentioned that a presentation on sediment transport was planned for the May 11, 2011 SAC meeting and welcomed members to attend.

BBEST member Dr. Norman Johns reviewed the criteria developed for the BBEST recommendations. He talked about the spring criteria based on rangia and summer criteria based on oysters; and for each criteria, an attainment frequency that needed to be met based on the historic record with some allowable level a departure. He discussed how the Goliad project was evaluated on these criteria using various scenarios; natural, historical, present, Region L baseline (full water rights), and TCEQ (full water rights use and no return flows). He said his review used the monthly net flows into the estuaries adjusted for the addition of the Goliad project. Dr. Johns said his review of the effects of the project with the BBEST

recommendation applied indicated that the instream flow criteria are doing a pretty good job. He added that the lack of flow is as a result of existing water rights and the project has minimum effect on those flows. BBEST Chair Sam Vaugh added that the BBASC can address issues with existing water rights as part of the recommended strategies to meet environmental flow standards.

Marty Rozelle introduced members to an exercise to determine whether the BBEST recommendations as applied to the hypothetical projects are balanced or restrictive of environmental and/or other needs. Chairman Vaugh asked members to consider the request as to whether the BBEST recommendation unduly restricts yield or the environment. The ultimate objective of the exercise is to determine what action will be taken under Task III and to provide direction to the technical consultants as to needed modifications to the BBEST recommendations and/or process of evaluation.

### **Task I–GBRA (Mid Basin) Project**

Brian Perkins, HDR, presented the GBRA mid basin project near Gonzales similar to a project in the Region L Water Plan and the second large theoretical project needed to meet the requirements of Task I of the charge. The GBRA project is a large run of the river diversion from the Guadalupe River near Gonzales to an off channel reservoir for subsequent uniform delivery of firm yield to Luling and San Marcos water treatment plants. As was presented for the first project, Mr. Perkins discussed the description of the GBRA project, firm yield calculations, and cost of the project. He discussed changes in the basic assumptions used in the evaluation from those used for the first project. He said that the BBEST recommendation had a greater effect on the yield because it is located in the middle of the basin unlike the San Antonio Project which is located in the lower basin, and the diversions in the Guadalupe Basin outweigh the return flows. Regarding the costs, Mr. Perkins was asked to look into the infrastructure costs to explain why the construction costs were so much higher when compared to the first project.

Mr. Ed Oborny, BioWest, presented the instream assessment of the GBRA project evaluated using the same process as for the San Antonio project. He noted that unlike the San Antonio project, the habitat suitability curves for the GBRA project were developed from generic statewide data, and show a wider range of suitable habitat. Therefore, the results from the various scenarios were the same. He recommended further evaluation of base flows because of the way the curves were generated. He noted the results also indicated that it would be difficult to meet an annual sediment yield of 10% change.

BBEST member Dr. Norman Johns talked about the results from the estuary ecology evaluation of the GBRA project. He said that the results indicated very little water available for diversion.

### **Discussion and Direction to Technical Consultants on BBASC Recommendations of Environmental Flow Standards (Task 3) (Perkins)**

Mr. Perkins stated that the BBEST recommendations along with CCEFN and Lyons had been evaluated using two sample projects, and asked the BBASC for direction on how to proceed. He added that after seeing the effect of the BBEST recommendations on the two sample

projects, members needed to decide if there is a need to increase yield by taking water from the streams or a need to leave more water in the streams for the environment. If an adjustment is needed, he asked what changes if any the members would want to make to the BBEST recommendations or what new direction is needed to be evaluated for members to complete the final BBASC recommendation. He provided a handout with possible options. Members discussed the options available. Members recommended the following for further review:

- Left hand column – No. 1 using SB2 numbers in San Antonio & Q95 in Guadalupe
  - o full analysis (river ecology, estuary ecology, and cost) Presented June 1st
- Left hand column – No. 2 Eliminate Diversions Below Baseflows Presented June 1st
  - o full analysis
- Right hand column – No. 3 Eliminate Some/All Pulses
  - o Yield results and flow numbers
- Right hand column – No. 4 Place Hydrologic Conditions on Pulses
  - o Yield results and flow numbers
  - o Members to decide on how to model May 19<sup>th</sup> with results on June 1st

### **New Task II Run of the River Unappropriated Flow Discussion**

The discussion for the new run of the river unappropriated flow discussion was postponed until the next meeting. Dr. Perkins stated that the technical support work can be done at a later date, and the question to address is how to define the threshold between a large and a small project which has been tentatively defined as 10,000 acre-feet. Members requested that the presentation for this discussion be distributed prior to the meeting.

### **X. Set Next Meeting Date, Time and Location**

The next meeting will be held at 10:00 a.m. on Thursday, May 19, 2011 at GBRA River Annex.

#### **Proposed Agenda Items:**

- Presentation of SAC Review Comments on the BBEST Report
- BBEST members to discuss the Estuary Effects
- Discussion of TPWD letter commenting on the GSA BBEST report
- Presentation by Brian Perkins (HDR) on final results Task II technical analysis
- Presentation by Dr. Norman Johns on preliminary evaluation of HDR results on Tasks II
- Formation of the Work Plan subcommittee
- Presentation on the Work Plan Elements.

### **XI. Public Comment**

Tony Smith suggested additional changes to the draft objective statement.

### **XII. Adjourn**